



COOLANT REPLACEMENT

1. DRAIN ENGINE COOLANT

CAUTION:

To avoid the danger of being burned, do not remove the radiator cap while the engine and radiator are still hot. Thermal expansion will cause hot engine coolant and steam to blow out from the radiator.

- Remove the service hole cover from the engine under cover.
- Install a vinyl hose onto the drain on the radiator side.
- Fix the vinyl hose with tape.
- Loosen the 3 drain plugs on the engine and radiator, and drain the coolant.
- Remove the radiator cap.
- Drain the coolant from the reservoir tank.
- Tighten the 3 drain plugs.
Torque: 13 N*m (130 kgf*cm, 9 ft.*lbf) for the engine
- Remove the vinyl hose from the radiator.

2. ADD ENGINE COOLANT

- Pour coolant into the radiator until it overflows.

Capacity

Transmission	Capacity
Manual Transmission	9.4 liters (9.9 Us qts, 8.3 Imp. qts)
Automatic Transmission	9.8 liters (10.4 Us qts, 8.6 Imp. qts)

NOTICE:

Do not substitute plain water for engine coolant.

HINT:

- Use of improper coolants may damage the engine cooling system.
 - Use only TOYOTA SLLC or similar high quality ethylene glycol based non-silicate, non-amine, non-nitrite, and non-borate coolant with long-life hybrid organic acid technology (coolant with long-life hybrid organic acid technology consists of a combination of low phosphates and organic acids).
 - New TOYOTA vehicles are filled with TOYOTA SLLC (color is pink, premixed ethylene glycol concentration is approximately 50 % and freezing temperature is -35°C (-31°F)). When replacing the coolant, TOYOTA SLLC is recommended.
- Check the coolant level inside the radiator by squeezing the inlet and outlet radiator hoses several times by hand. If the coolant level goes down, add coolant.
 - Install the radiator cap securely.

- (d) Slowly pour coolant into the radiator reservoir until it reaches the FULL line.
- (e) Warm up the engine until the cooling fan operates.
 - (1) Set the air conditioning as follows while warming up the engine.

Item	Condition
Fan Speed	Any setting except OFF
Temperature	Toward WARM
Air Conditioning Switch	OFF

- (2) Maintain the engine speed at 2,000 to 2,500 rpm and warm up the engine until the cooling fan operates.

NOTICE:

- **Make sure that the radiator reservoir still has some coolant in it.**
- **Pay attention to the needle of the water temperature meter. Make sure that the needle does not show an abnormally high temperature.**
- **If there is not enough coolant, the engine may burn out or overheat.**

- (f) Squeeze the inlet and outlet radiator hoses several times by hand while warming up the engine to bleed the air.

CAUTION:**When pressing the radiator hoses:**

- **Wear protective gloves.**
- **Be careful as the radiator hoses are hot.**
- **Keep your hands away from the fan.**

- (g) Stop the engine and wait until the coolant cools down.
- (h) Remove the radiator cap and check the coolant level inside the radiator.
- (i) If the coolant level is below the full level, repeat the operation until the coolant level remains at the full level.
- (j) Check the coolant level inside the radiator reservoir tank again. If it is below the full level, add coolant.

3. CHECK FOR ENGINE COOLANT LEAKAGE

- (a) Fill the radiator with coolant and attach a radiator cap tester.
- (b) Pump it to 177 kPa (1.8 kgf/cm² 25.7 psi), then check for leakage.